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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WEIER, ANTHONY J.

ART UNIT

PAPER NUMBER

1761

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/954,923

Applicant(s)

YOUSEF ET AL.

Examiner

Anthony Weier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 11, 12, 14, 15, 17-20, and 23-38 is/are rejected.
- 7) ☒ Claim(s) 7, 13, 16, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, 19, 20, 21, and 24-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al (U.S. Patent No. 5431939).

Cox et al discloses a process of treating shell eggs contaminated with bacteria wherein same placed in a sealed container which is eventually at atmospheric pressure, wherein the pressure is increased (e.g. 40 psi) by the addition of a gas or gas mixture (e.g. including oxygen, ozone and/or carbon dioxide), maintaining said egg in the sealed container for more than 1 minute (e.g. 10 min, see Example 9) after reaching a certain pressure and in such manner as to kill bacteria as called for in the instant claims (see e.g. col. 25, Table 5). It should be further noted that Cox et al further discloses leaving said egg in the container 15 minutes following the introduction of gas (i.e. 5 minutes for increasing the gas; 10 more minutes once the desired pressure is attained, see Example 9). Regarding claim 25, Cox et al further discloses decreasing the pressure in the container prior to introduction of the gas (e.g. ozone) or gas mixture.

Cox et al is silent concerning said treated eggs being unfertilized, that the temperature of the eggs is ambient before treatment, the internal temperature during processing, and the sequential introduction of carbon dioxide and ozone into the container. Eggs which are unfertilized are typically those which are sold at grocery stores and are, therefore, common. Absent a showing of unexpected results regarding

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treatment of this particular type of egg per se, it would have been obvious to one having ordinary skill in the art at the time of the invention to have employed such eggs as a matter of preference and due to their abundance and easy availability. Eggs are typically available at ambient temperature and, absent a showing of unexpected results, it would have been further obvious to have obtained eggs from such environment as a matter of preference or as a matter of availability. Cox et al is silent concerning the internal temperature of the egg during processing. Absent a showing of unexpected results, it is not seen wherein such temperature would provide for a patentable distinction. Certainly, a higher temperature would aid in the process of reducing bacteria. Nevertheless, it would have been further obvious to have arrived at a temperature within the range called for through routine experimental optimization, taking into account the amount of microbe kill to be attributed to temperature, use of ozone, etc. As for the use of a mixture of gases or introducing same one at a time, it is not seen where same would provide for a patentable distinction since the egg would be exposed to both gases in either case. Therefore, absent a showing of unexpected results, it would have been further obvious to have employed either a mixture or sequential introduction of said gases as a further matter of preference.

2. Claims 11, 12, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al (as discussed above) taken together with Bollinger et al.

The claims further call for treating said shell eggs with ultraviolet light. It is well known to do so as a measure for detecting dirt for subsequent cleaning as taught, for example, by Bollinger et al. It would have been obvious to one having ordinary skill in

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the art at the time of the invention to have employed same as an added processing step for producing better quality eggs. The claims further call for the particular wavelength of the ultraviolet light. However, Bollinger et al teaches a range of wavelengths which encompass that claimed. Absent a showing of unexpected results, it would have been further obvious to have arrived at the particular wavelength claims as a matter of preference within said range. The claims also call for the shell egg to remain in the container for 2 to 3 minutes after introduction of ozone. Although Cox et al doesn't specifically set for this particular time, such determination would have been well within the purview of a skilled artisan, and, absent a showing of unexpected results, it would have been further obvious to have arrived at such time values through routine experimental optimization.

3. Claims 7, 13, 16, 21, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Cox et al teaches away from using such high percentage of ozone; the amounts used in Cox et al are comparatively quite minute. Bollinger et al does not teach the particular intensity of ultraviolet to be used and employs same for a purpose different from that of the instant invention, a purpose which would naturally employ less intensity. By such teaching it is not considered obvious in view of Bollinger et al or any other reference of record to employ such level of intensity. None of the reference of record disclose or teach the sequential introduction of carbon dioxide and ozone under the individual pressure conditions called for in instant claims 21.

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4. Claim 10 is allowed (for reasons given in Paragraph 3).
5. Claims 9, 18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied in paragraphs 1 or 2 above and further in view of Schmitthaeusler et al.

Cox et al is silent regarding the use of ozone which has been created by electrochemical means and, instead, suggests the use of ultraviolet radiation. It should be noted, however, that it is well known to prepare ozone using either means as taught, for example, in Schmitthaeusler et al. (col. 3, lines 56-63), and, absent a showing of unexpected results, it would have been obvious to use either one as a matter of preference depending on, for example, availability, cost, etc.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 703-308-3846. The examiner can normally be reached on Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 703-308-3959. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Anthony Weier
Primary Examiner
Art Unit 1761

Anthony Weier



9/11/03